

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116  
U.S. Application No. 09/881,090  
Attorney Docket No. Q64761

### **REMARKS**

Claims 1-7 are all the claims pending in the application.

#### **I. Preliminary Matters**

Applicants would like to thank the Examiner for withdrawing the finality of the previous Office Action (PTO mail date January 23, 2003).

Additionally, Applicants thank the Examiner for indicating that the Corrected Drawings filed on June 15, 2001, are accepted by the Examiner. Further, Applicants would like to thank the Examiner for withdrawing the objection to the Title of the Invention.

#### **II. Claim Rejections based on Prior Art Grounds**

To summarize, the Examiner maintains the rejection of claims 1-7 under 35 U.S.C. § 103(a) as being obvious over Kashihara et al. (U.S. 6,081,054) in view of Binder (U.S. Patent No. 4,293,788). For at least the following reasons, Applicants respectfully traverse this rejection.

In the Response to Arguments, the Examiner takes the position that Kashihara discloses an automotive alternator essentially as claimed. Additionally, the Examiner alleges that Binder discloses the alternator with the centerlines of the brushes, the regulator and the connector being disposed on substantially the same plane extending in a radial direction for the purpose of providing the removal of the brush holder and voltage regulator as entire assembly while exposing the installed assembly to a cooling medium when operational, as allegedly set forth at column 1, lines 46-63, of Binder. The Examiner takes the position that the improvement in

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maintenance and operation of Binder provides sufficient motivation to one skilled in the art to apply the teaching of Binder to the alternator structure disclosed by Kashihara. Moreover, the Examiner alleges that such modification would merely require a rearrangement of parts of the Kashihara structure, which has been held to involve only routine skill in the art. Applicants respectfully disagree with the Examiner's position.

Applicants reiterate that the test for obviousness merely is not whether the individual elements can be found in a series of references. On the contrary, most if not all inventions arise from a combination of old elements. See *In re Kotzab*, 55 USPQ2d at 1316, citing *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. *Id.* Additionally, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990). In determining whether a suggestion or motivation exists, the references as a whole must be considered, including parts of the references that would lead away from the claimed invention. See MPEP § 2141.03. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See *In re Rattis*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); see also MPEP § 2143.01. Further, the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is not suggestion or motivation to make the

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proposed modification (see *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); see also MPEP § 2143.01).

As such, Applicants respectfully submit that, contrary to the Examiner's position, it would not have been obvious to combine the assembly of Binder with Kashihara to arrive at the claimed invention. That is, the Examiner takes the position that the improvement in maintenance and operation of Binder provides sufficient motivation to one skilled in the art to apply the teaching of Binder to the alternator structure disclosed by Kashihara. However, in determining the obviousness of combining the references, the Examiner must consider each of the references as a whole for what it discloses to a person of skill in the art.

In this case, the principle of operation of cooling the voltage regulator in Kashihara clearly is different than the principle of operation of cooling the voltage regulator in Binder. In particular, Kashihara discloses that the centrifugal fans 5 rotate so that the cooling air is sucked from the intake openings 1a, 2a in a front bracket 1 and a rear bracket 2 and discharged to the outside through exhaust openings 1b, 2b. On the other hand, Binder alleges that alternators in which the cooling air enters through openings formed in the end bells of the structure, such as the alternator disclosed in Kashihara, suffer from a problem in which the circulating air to be used for cooling is already hot. To overcome this problem, Binder discloses an alternator that intakes air in an essentially radial direction through the duct element 15. Accordingly, Applicants submit that Kashihara and Binder clearly operate differently. As such, when considered as a whole, Applicants submit that there would not have been a motivation or suggestion to combine Kashihara and Binder to arrive at the claimed invention.

Additionally, Applicants submit that there also would not have been a motivation to select individual components from Binder and to combine them with Kashihara to arrive at the claimed invention. Instead, Applicants submit that modifying Kashihara to include the brush holder and regulator assembly of Binder would change the principle of operation of Kashihara. For example, Binder discloses an assembly including a brush holder, a regulator, and a connector mounted to a plate that closes the outside of the housing. Thus, if the assembly of Binder were combined with Kashihara, the resulting device would interfere with the flow of cooling air into the end of the housing. In particular, Binder discloses that the plate has a function of covering the opening 20, preventing ingress of air, and forming a common support for the brush holder and the regulator (see, e.g., Abstract). As such, the plate of Binder clearly would interfere with the flow of cooling air over the regulator, which is a primary object of Kashihara. Additionally, since the connector of Binder is disposed at the opening 27 (as shown in Fig. 2; see also col. 4, lines 12-20), Applicants submit that the connector also would interfere with the flow of cooling air over the regulator, if it were employed in the device of Kashihara. This is because the device of Binder operates to receive cooling air from a radial direction, not from an axial direction, as disclosed in Kashihara.

Thus, Applicants submit that combining Kashihara and Binder would not result in an improvement in maintenance and operation of Kashihara, as alleged by the Examiner. On the contrary, Applicants submit that incorporating the assembly of Binder with the device of Kashihara would adversely affect the operation of Kashihara by preventing or hindering the flow of cooling air, which enters the housing from an axial direction, across the regulator.

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Accordingly, Applicants submit that the proposed modification would render Kashihara unsatisfactory for its intended purpose. As such, the claimed device would not have been obvious over the combination of Kashihara and Binder.

As set forth above, the Examiner alleges that such modification of Kashihara based on Binder to arrive at the claimed combination would require merely a rearrangement of parts of the Kashihara structure, which has been held to involve only routine skill in the art (see Office Action, page 4, first paragraph, citing *In re Japinkse*, 86 USPQ 70). Applicants respectfully disagree with the Examiner's position.

Applicants note that *In re Japinkse* held that the claims were unpatentable because rearranging the parts of the device would not have modified the operation of the device. Additionally, Applicants note that it is settled law that the mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of Applicants' specification, to make the necessary changes in the reference device (see *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App., & Inter. 1984); see also MPEP § 2144.04(VI)(C)).

In this case, Applicants submit that combining the assembly of Binder with Kashihara would modify the operation of Kashihara by hindering the flow of cooling air to the regulator. On the other hand, Applicants submit that the resulting combination of Kashihara and Binder would require extensive modification to arrive at the claimed invention, not a mere arrangement of parts, as alleged by the Examiner. That is, to prevent the assembly of Binder from adversely

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affecting the operation of Kashihara, at least the plate of Binder would have to be modified to permit the flow of cooling air from an axial direction. Applicants submit that such modification clearly cannot be characterized as a mere “rearrangement of parts”, as alleged by the Examiner.

Additionally, such modification is neither taught nor suggested by either Kashihara or Binder. Instead, the motivation for these modifications can only be found in Applicants’ own disclosure. However, Applicants own disclosure cannot be used against Applicant to establish the obviousness rejection. Rather, this motivation must stem from the cited references or the art in general.

For at least the foregoing reasons, Applicants submit that it would not have been obvious to combine Kashihara based on the teachings of Binder to arrive at the claimed invention, as recited in independent claim 1. Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claim 1 (and dependent claims 2-7) and allow these claims to pass to allowance.

Moreover, Applicants submit that the examiner has not applied the cited references to the additional limitations recited in claims 2-7. Therefore, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to these claims.

Further, Applicants respectfully submit that the Examiner has not responded to Applicants’ traversal arguments with respect to at least claim 3. That is, in the previous Response, Applicants submitted that neither Kashihara nor Binder, either alone or in combination, disclosed or suggested all of the recitations of claim 3.

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For example, dependent claim 3 recites, *inter alia*, “said connector is disposed at substantially an outer circumferential-side of said regulator and said brush, and center lines of said connector, said regulator and said brush are disposed on substantially said same plane extending in a radial direction.” In comparison, neither Kashihara nor Binder discloses or suggests at least a connector that is disposed on an outer circumferential-side of the regulator and the brush, as recited in claim 3. Instead, Kashihara discloses that the connector 23 is disposed within the same circumferential diameter 30c as the brushes and the regulator 18, as shown in Figure 4. Similarly, the connector disclosed by Binder also is within the same circumferential diameter as the brushes and the regulator, as shown in Figures 1 and 2 (see col. 4, lines 12-20). Therefore, Applicants submit that the combination of Kashihara and Binder clearly does not disclose or suggest all of the recitations of at least dependent claim 3. Accordingly, the rejection of claim 3 should be withdrawn. Alternatively, if the Examiner disagrees, Applicants respectfully request the Examiner to cite support for this position in either Kashihara or Binder so that Applicants may respond properly to the Examiner’s position.

### **III. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

  
John J. Dresch  
Registration No. 46,672

Date: September 8, 2003